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2a. SECURITY CLASSIFICATION AUTHORITY

2b. DECLASSIFICATION/DOWNGRADING SCHEDULE

4. PERFORMING ORGANIZATION REPORT NUMBER(S)

DOD POP HMTR/AYD 92-013

6a. NAME OF PERFORMING ORGANIZATION

Packaging Division, AED

6c. ADDRESS (City, State, and ZIP Code)

U.S. Army, ARDEC  
Picatinny Arsenal, NJ 07806-50008a. NAME OF FUNDING/SPONSORING  
ORGANIZATION

8c. ADDRESS (City, State, and ZIP Code)

6b. OFFICE SYMBOL  
(If applicable)

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Unlimited

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ELEMENT NO.PROJECT  
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NO.WORK UNIT  
ACCESSION NO.

11. TITLE (Include Security Classification)

Performance Oriented Packaging Report for Cutter, Cartridge, Actuated,  
Reefing Line, M21

12. PERSONAL AUTHOR(S)

Sniezek, Frank

13a. TYPE OF REPORT

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13b. TIME COVERED

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16. SUPPLEMENTARY NOTATION

17. COSATI CODES

FIELD GROUP SUB-GROUP

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)

Performance Oriented Packaging, POP,  
Cutter, Cartridge, Actuated, Reefing  
Line, M21

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This POP report is for the Cutter, Cartridge, Actuated, Reefing Line, M21 which is packaged 80 cutters/Mil-B-2427 wood box. This report describes the results of testing conducted.

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20. DISTRIBUTION/AVAILABILITY OF ABSTRACT

☐ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS

21. ABSTRACT SECURITY CLASSIFICATION

Unclassified

22a. NAME OF RESPONSIBLE INDIVIDUAL

STEVE RUFFINI

22b. TELEPHONE (Include Area Code)

(201) 724-2515

22c. OFFICE SYMBOL

SMCAR-AEP

I. REPORT NUMBER: DOD POP HMTR/AYD 92-013

II. TITLE: Performance Oriented Packaging Report for Cutter, Cartridge,  
Actuated, Reefing Line, M21

PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army  
ARDEC, SMCAR-AEP  
HQ, U.S. Army Armament, Munitions, and Chemical Command  
Picatinny Arsenal, NJ 07806-5000

DATE: 2 Nov 92

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## 1. DATA SHEET

### CONTAINER

Type: Box  
UN Code: 4C1  
Nomenclature: Box, Packing, Ammunition, for Cutter, Cartridge,  
Actuated, Reefing Line, M21  
Specification Number: Type II, Grade A, Class 2, Mil-B-2427  
Drawing Number: 8863436  
Material: Wood  
Gross Weight: 50 pounds  
Outside Dimensions: 15 13/16 x 12 15/16 x 9 11/32  
Inside Dimensions: 12 11/16 x 11 3/8 x 7

### PRODUCT

Name: Cutter, Cartridge Actuated, Reefing Line, M21  
Drawing Number: 8875978  
United Nations Number: 0070  
Physical State: Solid  
Amount per Container: 80

## 2. BACKGROUND, TESTS, AND RESULTS

Reference the following document:  
a. 49CFR, October 1, 1991 Edition

Instead of testing with the actual item, three wooden boxes built to the same specification but packed with a fiberboard box loaded with sand to a gross weight of 60 pounds were tested.

A Stacking Test was conducted on one container with a weight of 910 pounds for 72 hours in lieu of three containers for 24 hours. This weight exceeds the minimum requirement for a 10 foot stack height which is 771 pounds.

A Loose Cargo Test was conducted on three containers for one hour. The packages were tested at a vibration table frequency such that the bottom of the packages were raised 1/4 inch from the platform, which exceeds the requirement of 1/16 inch.

A Four Foot Drop Test was conducted on one of the containers that was subjected to the Loose Cargo Test. One container was dropped five times at different orientations as follows: top, bottom, long side, short side, and a top corner at the closure. This exceeds the requirement of one drop per container.

Test results indicated no leakage or spillage of the contents from the containers following any of the tests conducted, meeting the requirements of the 49 CFR.